

## CENTRAL INTELLIGENCE AGENCY

## INFORMATION REPORT

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SECRET  
SECURITY INFORMATION

COUNTRY	USSR (Moscow Oblast)	REPORT	<input type="text"/>	25X1
SUBJECT	Press Form Device Used for Manufacturing Vacuum Tube Wafers	DATE DISTR.	21 May 1953	
		NO. OF PAGES	3	
DATE OF INFO.	<input type="text"/>	REQUIREMENT NO.	RD	25X1
PLACE ACQUIRED	<input type="text"/>	REFERENCES	<input type="text"/>	25X1

This is UNEVALUATED Information

THE SOURCE EVALUATIONS IN THIS REPORT ARE DEFINITIVE.  
THE APPRAISAL OF CONTENT IS TENTATIVE.  
(FOR KEY SEE REVERSE)

25X1

1.  the Tool Design Construction Office of Institute 160 at Fryazino. The Institute is about a 45-minute bus ride from Monino.  the Institute  purpose was the designing and production of radio tubes. 25X1

2.  the task of designing a machine for cutting glass wafers to a specific size and shape for use in glass radio tubes.  an assembly consisting of the glass base, or wafer, of a radio tube having four molybdenum wires passing through the wafer at evenly spaced intervals. This base was placed in a die which had four holes drilled for the four wires to fit into. Four gas jets were evenly distributed around the die for the purpose of heating the glass prior to the cutting process.  25X1

Within

25X1

25 YEAR  
RE-REVIEW

SECRET

STATE	#X	ARMY	#X	NAVY	#X	AIR	#X	FBI		AEC					
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(Note: Washington Distribution Indicated By "X"; Field Distribution By "#".)

25X1

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25X1

this framework it was necessary to have suspended, by means of a spring, a cylindrical-cutting blade that could be operated by a hydraulic press behind the device. This apparatus rested on a base that could be secured to a table top by means of four bolts. [redacted] For operation, this device was to be placed in front of a hydraulic press and the press was to be brought in contact with the device at point A on the design.

25X1

3. In the cutting process the glass wafer to be trimmed was heated almost to the melting point by the gas jets surrounding it. When the wafer was heated to the proper state, almost melting point, the circular blade was gradually depressed, cutting the molten glass and at the same time removing the trimmings. The wafer was permitted to cool in the die before removing it.
4. The hydraulic press [redacted] was approximately three feet wide, two feet deep, and five feet high.

5.

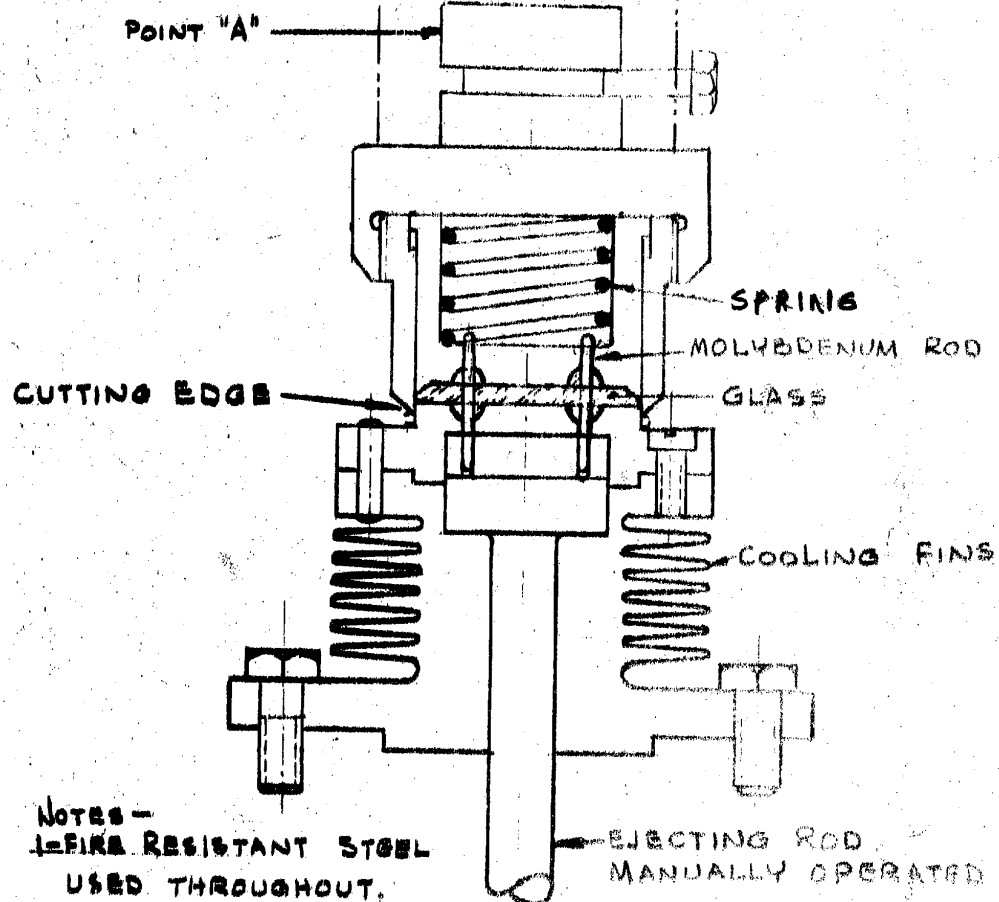
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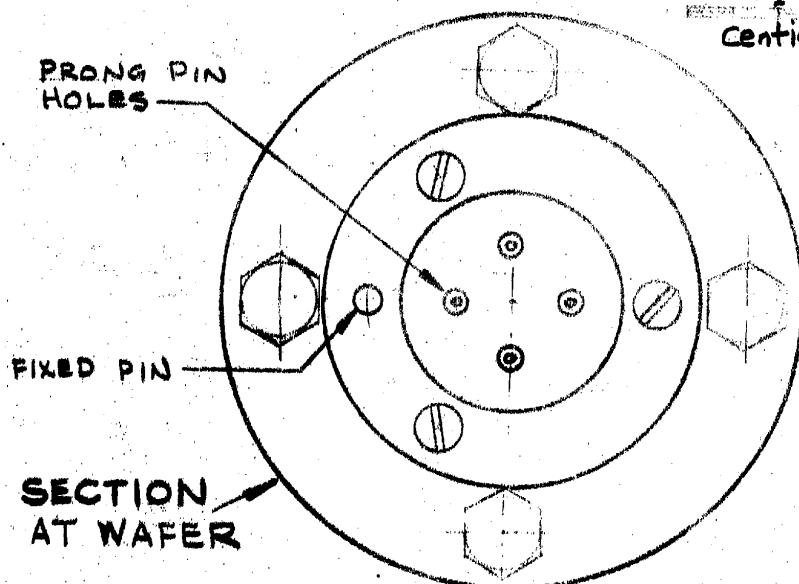
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NOTES -  
1 - FIRE RESISTANT STEEL  
USED THROUGHOUT.

0 1 2 3 4 5  
Centimeters

PRESS FORM DEVICE

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